

INDEX
RUBBER CHEMISTRY AND TECHNOLOGY
VOLUME 79, 2006
AUTHOR INDEX

Ahagon, Asahiro; Kirino, Yoshiaki: Aging of black filled rubber under deformation (4) 641
Allen, Robert D.: International Rubber Science Hall of Fame Inductee: Thor L. Smith (2) G2
Alvarez Grima, M.M.; Talma, A.G.; Datta, R.N.; Noordermeer, J.W.M.: New concept of co-agents for scorch delay and property improvement in peroxide vulcanization (4) 694
Ansarifar, A.; Wang, L.; Ellis, R.J.; Kirtley, S.P.: The reinforcement and crosslinking of styrene butadiene rubber with silanized precipitated silica nanofilms (1) 39

Bai, Huadong, see Zhou, Shuqin: (4) 602
Balard, H., see Donnet, J.B.: (1) 120
Baldwin, John, see Ellwood, Kevin R.J.: (2) 219
Bandyopadhyay, A., see Patel, S.: (5) 820
Bauer, David R., see Ellwood, Kevin R.J.: (2) 219
Bhowmick, Anil K.; Vijayabaskar, V.: Electron beam curing of elastomers (3) 402
Bhowmick, Anil K., see Patel, S.: (5) 820
Boretti, L.G.; Woolard, C.D.: An appropriate model compound for the accelerated sulfur vulcanization of polypropylene. I. The mechanism of bisbenzothiazole-2,2'-disulfide accelerated vulcanization of squalene in the absence of ZnO (1) 135
Bryg, Victoria, see Smith, Ronald: (3) 520

Cakmak, M., see Fiorentini, F.: (1) 55
Chen, J., see Farboodmanesh, S.: (2) 199

Datta, R.N., see Pierre, C.C.: (1) 1
Datta, R.N., : Reduced hysteresis in truck tread compounds by using aramid short fibers (1) 26
Datta, R.N., see Alvarez Grima, M.M.: (4) 694
Datta, Rabin N., see Heideman, Geert: (4) 561
Datta, S., see Pierre, C.C.: (1)
Datta, Sudhin, see Toki, Shigeyuki: (3) 460
Donnet, J.B.; Santini, A.; Maafa, D.; Balard, H.; Padella, F.; La Barbera, A.: The difference between iodine number and nitrogen surface area determination for carbon blacks (1) 120
Donnet, J.B., see Wang, C.C.: (5) 783

Ellis, R.J., see Ansarifar, A.: (1) 39
Ellwood, Kevin R.J.; Baldwin, John; Bauer, David R.: Numerical simulation of thermal oxidation in automotive tires (2) 219

Farboodmanesh, S.; Chen, J.; Mead, J.; White, K.: Effect of construction on mechanical behavior of fabric reinforced rubber (2) 199
Fatemi, A., see Mars, W.V.: (4) 589
Feichter, Christian; Major, Zoltan; Lang, Reinhold W.: Experimental determination of fatigue crack growth behavior and surface strain distribution of faint-waist pure shear specimens with different crack tip radii (4) 712
Feshler, Matthew, see Reifsnider, Kenneth: (5) 881
Fiorentini, F.; Cakmak, M.; Mowdood, S.K.: Influence of nanosilica particles on hysteresis and strain induced crystallization of natural rubber as investigated by a real time true stress—true strain birefringence system (1) 55
Fulton, W.Stephen, : Tire—cord adhesion —How the source of zinc can influence the structure of the bonding interface (5) 790

Gent, A.N.; Yeoh, O.H.: Small indentations of rubber blocks: Effect of size and shape of block and lateral compression (4) 674
Gonzales-Alvarez, A., see Robles-Vasquez: (5) 859
Goss, W.C.; Monthey, S.: Review and the latest update of N-nitrosoamines in the rubber industry; the regulated, the potentially regulated, and the compounding to eliminate nitrosoamine formation (3) 541

INDEX
RUBBER CHEMISTRY AND TECHNOLOGY
VOLUME 79, 2006
AUTHOR INDEX

Ahagon, Asahiro; Kirino, Yoshiaki: Aging of black filled rubber under deformation (4) 641
Allen, Robert D.: International Rubber Science Hall of Fame Inductee: Thor L. Smith (2) G2
Alvarez Grima, M.M.; Talma, A.G.; Datta, R.N.; Noordermeer, J.W.M.: New concept of co-agents for scorch delay and property improvement in peroxide vulcanization (4) 694
Ansarifar, A.; Wang, L.; Ellis, R.J.; Kirtley, S.P.: The reinforcement and crosslinking of styrene butadiene rubber with silanized precipitated silica nanofilms (1) 39

Bai, Huadong, see Zhou, Shuqin: (4) 602
Balard, H., see Donnet, J.B.: (1) 120
Baldwin, John, see Ellwood, Kevin R.J.: (2) 219
Bandyopadhyay, A., see Patel, S.: (5) 820
Bauer, David R., see Ellwood, Kevin R.J.: (2) 219
Bhowmick, Anil K.; Vijayabaskar, V.: Electron beam curing of elastomers (3) 402
Bhowmick, Anil K., see Patel, S.: (5) 820
Boretti, L.G.; Woolard, C.D.: An appropriate model compound for the accelerated sulfur vulcanization of polypropylene. I. The mechanism of bisbenzothiazole-2,2'-disulfide accelerated vulcanization of squalene in the absence of ZnO (1) 135
Bryg, Victoria, see Smith, Ronald: (3) 520

Cakmak, M., see Fiorentini, F.: (1) 55
Chen, J., see Farboodmanesh, S.: (2) 199

Datta, R.N., see Pierre, C.C.: (1) 1
Datta, R.N., : Reduced hysteresis in truck tread compounds by using aramid short fibers (1) 26
Datta, R.N., see Alvarez Grima, M.M.: (4) 694
Datta, Rabin N., see Heideman, Geert: (4) 561
Datta, S., see Pierre, C.C.: (1)
Datta, Sudhin, see Toki, Shigeyuki: (3) 460
Donnet, J.B.; Santini, A.; Maafa, D.; Balard, H.; Padella, F.; La Barbera, A.: The difference between iodine number and nitrogen surface area determination for carbon blacks (1) 120
Donnet, J.B., see Wang, C.C.: (5) 783

Ellis, R.J., see Ansarifar, A.: (1) 39
Ellwood, Kevin R.J.; Baldwin, John; Bauer, David R.: Numerical simulation of thermal oxidation in automotive tires (2) 219

Farboodmanesh, S.; Chen, J.; Mead, J.; White, K.: Effect of construction on mechanical behavior of fabric reinforced rubber (2) 199
Fatemi, A., see Mars, W.V.: (4) 589
Feichter, Christian; Major, Zoltan; Lang, Reinhold W.: Experimental determination of fatigue crack growth behavior and surface strain distribution of faint-waist pure shear specimens with different crack tip radii (4) 712
Feshler, Matthew, see Reifsnider, Kenneth: (5) 881
Fiorentini, F.; Cakmak, M.; Mowdood, S.K.: Influence of nanosilica particles on hysteresis and strain induced crystallization of natural rubber as investigated by a real time true stress—true strain birefringence system (1) 55
Fulton, W.Stephen, : Tire—cord adhesion —How the source of zinc can influence the structure of the bonding interface (5) 790

Gent, A.N.; Yeoh, O.H.: Small indentations of rubber blocks: Effect of size and shape of block and lateral compression (4) 674
Gonzales-Alvarez, A., see Robles-Vasquez: (5) 859
Goss, W.C.; Monthey, S.: Review and the latest update of N-nitrosoamines in the rubber industry; the regulated, the potentially regulated, and the compounding to eliminate nitrosoamine formation (3) 541

Grishin, B.S., see Scherbakov, Yu. M.: (1) 94
Gurvish, Mark R., : On multi-scale modeling of elastomeric laminated composites for structural analysis (2) 217

Heideman, Geert; Noordermeer, Jacques W.M.; Datta, Rabin N.: Multifunctional additives as zinc-FREE curatives for sulfur vulcanization (4) 561
Henry, William M., see Joyce, George A.: (5) 735
Hergenrother, William L.; Ulmer, J.D.; Robertson, Christopher G.: Assignment of effective network chains in cured rubbers derived from chemical crosslinking, entanglements, polymer end linking to carbon black and filler interaction:VII Tensile retraction measurement (2) 338
Horgan, Cornelius O.; Saccomandi, Giuseppe: Phenomenological hyperelastic strain-stiffening constitutive models for rubber (1) 152
Horton, J.M.; Tupholme, G.E.: Stiffness of annular bonded rubber flanged bushes (2) 233
Hsiao, Benjamin S., see Toki, Shigeyuki: (3) 460
Huang, Xinyu, see Reifsneider, Kenneth: (5) 881

Ikeda, Yuko, see Kato, Atsushi: (4) 653
Ilsch, S., see Le, H.H.: (4) 610, 621
Issel, H.-M., see Goss, L.C., Jr.: (3) 541

Joseph, Rani, : HXNBR coating for improving aging resistance of natural rubber products (4) 553
Joseph, Rani, see Nisha, V.S.: (5) 870
Joyce, George A.; Henry, William M.: Modeling the equilibrium compressed void volume of carbon black (5) 735

Karadeniz, Sami, see Vahapoglu, Vahap: (3) 489
Kato, Atsushi; Shimamuki, Junichi; Kohjiya, Shinzo; Ikeda, Yuko: Three-dimensional morphology of carbon black in vulcanizates as revealed by 3D-TEM and dielectric measurements (4) 653
Kim, S.W.; Park, H.Y.; Seo, K.H.: Effects of cure systems of ground rubber and rubber matrix on their adhesion and crosslink structures of ground rubber and rubber matrix (5) 806
Kirino, Yoshiaki, see Ahagon, Asahiro: (4) 641
Kirtley, S.P., see Ansarifar, A.: (1) 39
Kohjiya, Shinzo, see Toki, Shigeyuki: (3) 460
Kohjiya, Yuko, see Kato, Atsushi: (4) 653

La Barbera, A., see Donnet, J.B.: (1) 120
Landel, Robert F., : A two-part tale: The WLF equation and beyond linear viscoelasticity (3) 381
Lang, Reinhold W., see Feichter, Christian: (4) 712
Le, H.H.; Qamer, Z.; Ilsch, S.; Radusch, H.-J.: Carbon black distribution in thee components of rubber blends monitored by online measured electrical conductance (4) 621
Le, H.H.; Tiwari, M.: Online-method for characterization of the homogeneity of rubber compounds filled with non-conductive carbon black (4) 610
Li, Shaoyi, see Zhou, Shuqin: (4) 602
Lin, Chency J., see Scurati, Alberto: (1) 170

Maafa, D., see Donnet, J.B.: (1) 120
Major, Zoltan, see Feichter, Christian: (4) 712
Mao, Guangzhao, see Sands, Michael Benjamin: (5) 765
Marchmann, G.; Verron, E.: Comparison of hyperelastic models for rubberlike materials (5) 835
Mars, W.V.; Fatemi, A.: Analysis of fatigue life under complex loading: Revisiting Cadwell, Merrill, Sloman, and Yost (4) 589
McMillin, Carl R., : Biomedical applications of rubbers and elastomers (3) 500
Mead, J., see Farboodmanesh, S.: (2) 199
Measmer, Matthew B., see Tsou, Andy H.: (2) 281
Mekkriengkral, Dararat; Sakdapipanich, Jitladda T.; Tanaka, Yasuyuki: structural characterization of terminal groups in natural rubber " Origin of nitrogenous groups (2) 366
Monthey, S.F., see Goss, L.C., Jr.: (3) 541
Mowdood, S.K., see Fiorentini, F.: (1) 55

Nisha, V.S.; Joseph, Rani: Preparation and characterization of radiopaque natural rubber (5) 870
Noordermeer, J.W.M., see Alvarez Grima, M.M.: (4) 694

Noordermeer, Jacques W.M., see Heideman, Geert: (4) 561

Padella, F., see Donnet, J.B.: (1) 120

Park, H.W.; see Kim, S.W.: (5) 806

Patel, S.; Bandyopadhyay, A.; Vijaybaskar, V.; Bhowmick, Anil K.: Preparation and properties of new *in situ* acrylic copolymer/terpolymers—clay hybrid nanocomposites (5) 820

Patil, Pankaj Y.; Van Ooij, William J.: Mechanistic study of the effect of adhesion-promoter resins on the crystal structure of the copper sulfide adhesion layer at the rubber—brass interface (1) 82

Pierre, C.C.; Datta, S.; Datta, R.N.; Talma, A.G.: Chemistry of various accelerators in an E-SBR model compound (1) 1

Puig, J.E., see Robles-Vasquez: (5) 859

Qamer, Z., see Le, H.H.: (4) 621

Radusch, H.-J., see Le, H.H.: (4) 610, 621

Ray, D.T., see Schloman Jr., W.W.: (4) 631

Reicks, Allan V., see Rudolph, Thomas J.: (2) 307

Reifsnider, Kenneth; Huang, Xinyu; Zou, Yue; Solasi, Roham; Fesler, Matthew: Multifunctional engineering design of elastomeric components (5) 881

Robertson, C.G., see Roland, C.M.: (2) 267

Robertson, Christopher G., see Hergenrother, William I.: (2) 338

Robles-Vasquez, O.; Gonzales-Alvarez, A.; Puig, J.E.: A composition rule to predict the linear viscoelastic properties of polybutadienes with varying microstructure (5) 859

Roland, C.M.; Robertson, C.G.: Recovery of shear-modified polybutadiene solutions (2) 267

Roland, C.M., : Mechanical behavior of rubber at high strain rates (3) 429

Rudolph, Thomas J.; Reicks, Allan V.: Viscoelastic indentation and resistance to motion of conveyor belts using a generalized Maxwell model of the backing material (2) 307

Saccomundi, Giuseppe, see Horgan, Cornelius O.: (1) 152

Sakdapipanich, Jitladda T., see Yunyongwattanakorn, Jintana: (1) 72

Sakdapipanich, Jitladda T., see Mekkriengkral, Dararat: (2) 366

Sands, Michael Benjamin; Subramanian, Vijay; Mao, Guangzhao: Thermal characterization of the interaction of silanes with dihydroxy vulcanized fluoroelastomers (5) 765

Santini, A., see Donnet, J.B.: (1) 120

Schloman Jr., W.W.; Teotor, V.H.; Ray, D.T.: Protein levels affect the cure efficiency and allergenic potential of polyisoprene latices (4) 631

Scurati, Alberto; Lin, Cheney J.: The hysteresis temperature and strain dependences in filled rubbers (1) 170

Seo, K.H., see Kim, S.W.: (5) 806

Sherbakov, Yu.M.; Grishen, B.S.: Theory to the calculations of stresses in real networks (1) 94

Shimanuki, Junichi, see Kato, Atsushi: (4) 653

Smith, Ronald; Bryg, Victoria: Staining polymers for microscopical examination (3) 520

Solasi, Rohan, see Reifsnider, Kenneth: (5) 881

Subramanian, Vijay, see Sands, Michael Benjamin: (5) 765

Talma, A.G., see Pierre, C.C.: (1) 1

Talma, A.G., see Alvarez Grima, M.M.: (4) 694

Tanaka, Yasuyuki, see Mekkriengkral, Dararat: (2) 366

Teotor, V.H., see Schloman Jr., W.W.: (4) 631

Tiwari, M., see Le, H.H.: (4) 610

Toki, Shigeyuki; Hsiao, Benjamin S.; Kohjiya, Shinzo; Tosaka, Masatoshi; Tsou, Andy H.; Datta, Sudhin: Synchrotron x-ray studies of vulcanized rubbers and thermoplastic elastomers (3) 460

Tosaka, Masatoshi, see Toki, Shigeyuki: (3) 460

Tsou, Andy H.; Measmer, Matthew B.: Dispersion of layered organosilicates in isobutylene-based elastomers (2) 281

Tsou, Andy H., see Toki, Shigeyuki: (3) 460

Tupholme, G.E., see Horton, J.M.: (2) 233

Ullmer, J.D., see Hergenrother, William I.: (2) 338

Vahapoglu, Vahap; Karadeniz, Sami: Constitutive equations for isotropic rubber-like materials using phenomenological approach: A Bibliography (1930-2003) (3) 489

Van Baarle, Ben, see Heideman, Geert: (4) 561.

Van Ooij, William J., see Patil, Pankaj Y.: (1) 82

Verron, E., see Marckmann, G.: (5) 835

Vijayabaskar, V., see Bhowmick, Anil K.: (3) 402

Vijaybaskar, V., see Patel, S.: (5) 820

Wang, C.C.; Donnet, J.B.; Wu, S.H.; Wang, T.K.: Microdispersion of carbon blacks in rubber. Part I: Some quantitative aspects by AFM image analysis (5) 783

Wang, L., see Ansarifar, A.: (1) 39

Wang, T.K., see Wang, C.C.: (5) 783

White, K., see Farboodmanesh, S.: (2) 199

Woolard, D.C., see Boretti, L.G.: (1) 135

Wu, S.H., see Wang, C.C.: (5) 783

Yeoh, O.H., : Some geometric considerations for rubber—metal bond test specimens (2) 320

Yeoh, O.H., see Gent, A.N.: (4) 674

Yunyongwattanakorn, Jintana; Sakdapipanich, Jitladda T.: Physical property changes in commercial natural rubber during long term storage (1) 72

Zhou, Shuqin; Li, Shaoyi; Bai, Huadong: Study on crosslinking in diimide reductions of nitrile butadiene rubber (4) 602

Zou, Yue, see Reifsnider, Kenneth: (5) 881

INDEX
RUBBER CHEMISTRY AND TECHNOLOGY
VOLUME 79, 2006
SUBJECT INDEX

Accelerator system, for vulcanization of HXNBR (4) 553
Accelerators, in e-SBR model compound (1) 1
Acrylic copolymers, and hybrids with clay, nanocomposites with superior mechanical properties and thermal stability (5) 820
Adhesion and crosslink structure, of ground rubber and matrix, effect of cure system (5) 806
Adhesion, of rubber to tire cord, influence of zinc source (5) 790
Adhesion-promoting resins, effect on crystal structure of copper sulfide adhesion layer at rubber—brass interface (1) 82
AFM image analysis, for quantitative study of carbon black macropdispersion in rubber (5) 783
Aging, in auto tires, role of thermal oxidation (2) 219
Aging, of black-filled rubber under deformation (4) 641
Aging, of NR, improved by thin coating of HXNBR (4) 553
Allergenic potential, in NR reduced by reducing protein levels (4) 631
Amine complexes, with fatty acids, as zinc-free curatives for SBR (4) 561
Aramid short fibers, for reducing hysteresis in truck tire treads (1) 26

Backing material, for conveyor belts, generalized Maxwell model for predicting properties (2) 307
Basic Autoxidation scheme, used for numerical simulation of thermal oxidation of auto tires (2) 219
Biomedical applications, of elastomers (review) (3) 500
Birefringence system, real-time, true stress—true strain, for studying influence of nanosilicate particles on hysteresis and strain-induced crystallization on NR (1) 55
Bisbenzothiazole-2'-2'-disulfide accelerated S vulcanization, studied through squalene model (1) 135
Bismaleimide coagent with sulfur containing compound, for vulcanization with scorch delay (4) 694
BMI-MP and DPTT, for scorch delay during peroxide vulcanization (4) 694

Cadwell, Merrill, Sloman, Yost—review of theories on fatigue life under complex loading (4) 589
Carbon black distribution, in rubber blends, monitored by online measured electrical conductance (4) 621
Carbon black, furnace, compressed void volume for structure characterization (5) 735
Carbon black, non-conductive, on-line method for checking homogeneity of compounds containing (4) 610, 621
Carbon black, studied in NR by 3D transmission electron microscope (4) 653
Carbon black, study of microdispersion in rubber by AFM image analysis (5) 783
Carbon blacks, using iodine number or nitrogen surface area determination for surface area determination (1) 120
CBS (N-cyclohexyl-2-benzothiazole sulfenamide), in sulfur vulcanization of e-SBR (1) 1
CDMPS (N-cyclohexyl-4,6-dimethyl-2-oxypyrimidine sulfenamide), in S vulcanization of e-SBR (1) 1
Charles Goodyear Medalist, 2006: Robert F. Landel (3) G2
Chemistry of Thermoplastic Elastomers Award, 2005, to Garth L. Wilkes (2) G6
Clay composites, with acrylic copolymers, for superior mechanical and thermal properties (5) 820
Complex loading, effect on results of fatigue life (4) 589
Composition rule, for predicting viscoelastic properties of polybutadiene (5) 859
Compressed void volume, of furnace blacks, for structure characterization (5) 735
Constitutive equations, for isotropic rubber-like materials using phenomenological approach (bibliog) (3) 489
Conveyor belting, viscoelastic indentation and resistance to motion, determined using a generalized Maxwell model of the backing material (2) 307
Crack growth initiation law, as related to fatigue behavior and strain distribution (4) 712
Crack tip radius, as related to fatigue crack growth (4) 712
Crosslinking, of black filled rubber, as affected by prolonged dynamic deformation (4) 641
Crystallization, strain-induced, of NR, influence of nanosilica particles (1) 55
Cure systems, for ground rubber and rubber matrix, effect on adhesion and crosslink structure (5) 806
Curing, of elastomers by electron beam (review) (3) 402

Dehydrofluorination, of dihydroxy vulcanized fluoroelastomers (5) 765
Diimide reduction, in NBR, preventing of gel formation by use of hydroquinone (4) 602
Dispersion, of layered organosilicates in isobutylene elastomers (2) 281

Effective network chains, derived from crosslinking, entanglements, end linking to carbon black and filler interactions, studying by tensile traction measurements (2) 338

Elasticity, of ideal networks with entanglements., for calculating stresses in real networks (1) 94

Electron beam curing, of elastomers (review) (3) 402

Fabric-reinforced rubber, effect of construction on mechanical behavior (2) 199

Fatigue crack growth, of "faint-waist pure shear" specimens, with different crack tip radii (4) 712

Fatigue life, analysis under complex loading (4) 589

Fernley H. Banbury Award, 2005, to Christopher W. Macosko (2) G6

Filled rubber, hysteresis temperature and strain dependence (1) 170

Fluoroelastomers, crosslinked with aminosilane and vinyl silane, thermal characterization (5) 765

Galiatsatus, Vasilios, Sparks—Thomas Award, 2005 (2) G5

Gaskets and seals, determining lateral compression of small indentations (4) 674

Gent model, for boundary value problems in the rubber industry (1) 152

Geometric considerations, for rubber—metal bond testing (2) 320

George Stafford Whitby Award, 2005, to Dr. Gregory B. McKenna (2) G5

Goodyear Medalist Lecture, 2006, by Robert F. Landel (3) 381

Ground rubber, effect of cure system on adhesion and crosslink structure, with rubber matrix (5) 806

Heat aging resistance, of NR, improved by coating with coating of HXNBR (4) 553

High strain rates, effect on mechanical behavior of rubber (review) (3) 429

Homogeneity, of rubber filled with non-conductive carbon black, checking on line (4) 610

Homogeneity, of rubber filled with non-conductive carbon black, checking on line (4) 621

HXNBR (hydrogenated carboxylated nitrile rubber), coating for good heat aging and oil resistance (4) 553

Hyperelastic models, for rubberlike materials (5) 835

Hysteresis temperature, and strain dependence, in filled rubber (1) 170

Hysteresis, of NR, influence of nanosilica particles (1) 55

Implants, problems for polyurethane, silicone and other polymeric forms (review) (3) 500

Indentation, of rubber blocks, effect of size, shape and lateral compression (4) 674

International Rubber Science Hall of Fame, Thor L. Smith, 2005 inductee (2) G2

Iodinated NR, for radiopaque uses (5) 870

Iodine number, vs nitrogen surface area determination in carbon black (1) 120

Ionomers, for elastomeric membranes, studied by nonlinear constitutive equations (5) 881

IR, accelerated S vulcanization, studied using squalene as model (1) 135

Isobutylene-based elastomers, with dispersions of layered organosilicates (2) 281

Isotropic rubber-like materials, constitutive equations using phenomenological approach, (Bibliog) (3) 489

Laminated elastomeric composites, multi-scale modeling for structural analysis (2) 217

Landel, Robert E. Charles Goodyear Medal (2) G4

Landel, Robert F., Recipient of Charles Goodyear Medal for 2006 (biog) (3) G2

Lateral compression, of rubber blocks, effect of small indentations (4) 674

Linear viscoelasticity, considerations by the Goodyear Medalist (3) 381

Loading conditions, in comparisons of hyperelastic materials (5) 835

Macosko, Dr. Christopher W., Fernley H. Banbury Award, 2005 (2) G6

Maxwell model, for viscoelastic indentation and resistance to motion, of conveyor belt backing material (2) 307

McKenna, Dr. Gregory B., George Stafford Whitby Award, 2005 (2) G5

Mechanical behavior, of rubber, at high strain rates (review) (3) 429

Melvin Mooney Distinguished Technology Award, 2005, Meng-Jiao Wang (2) G4

Microdispersion, of carbon black in rubber, by AFM image analysis (5) 783

Microscopy, of polymers, staining (review) (3) 520

Model compound, for accelerated S vulcanization of IR (1) 135

Models, for hyperelastic materials, comparison (5) 835

Multifunctional additives, amine-based, for S cure of SBR (4) 561

Multi-scale modeling, of elastomeric laminates, for structural analysis (2) 217

Nanocomposites, of acrylic copolymers and hybrids with clay (5) 820

Nanocomposites, of layered organic silicates, dispersion in isobutylene-based elastomers (2) 281
Nanocomposites, of rubbery composites, studied by 3-D TEM (4) 653
Nanosilica particles, influence on hysteresis and strain induced crystallization in NR (1) 55
NBR (acrylonitrilebutadiene rubber), preventing gel during hydrogenation by use of hydroquinone (4) 602
NBR , crosslinking in diimide reduction controlled by hydroquinone gel inhibitor (4) 602
Nitrogen surface area study, of carbon black surface compared with iodine number method (1) 120
Nitrogenous end groups, in NR (2) 366
Nitrosoamines, attempt to eliminate in rubber compounds (review) (3) 541
Nitrosoamines, formation in rubber compounds (review) (3) 541
Non-linear shearing, to reduce entanglements in PB and improve processing (2) 267
NR, effect of long term storage on physical properties (1) 72

On-line method, for checking homogeneity of compounds filled with non-conductive carbon black (4) 610, 621

PB, reducing entanglements by non-linear shearing, for improved processibility (2) 267
Peroxide cure, improving scorch delay using bismaleimide type coagent with sulfur-containing compound (4) 694
Phenomenological hyperelastic strain-stiffening constitutive models, for rubber (1) 152
Polybutadiene, with varying microstructures, viscoelasticity of (5) 859
Polyisoprene latices, protein levels as they affect cure and allergenic potential (4) 631
Polyurethanes, biomedical applications (review) (3) 500
Protein levels, effect on cure efficiency and allergenic potential in polyisoprene latices (4) 631

Radiation curing, of elastomers (review) (3) 402
Radiopaque NR, preparation and characterization (5) 870
Rubber blocks, effect of lateral compression on small indentations (4) 674
Rubber Division, ACS, Best Paper Awards, 168th Technical Meeting, Nov. 2005 (2) G7
Rubber Division, ACS, Charles Goodyear Medal, 2006, Robert E. Landel (2) G4
Rubber—brass interface, studying effect of adhesion-promoting resins on crystal structure of copper sulfide adhesion layer (1) 82
Rubber—metal bond testing, geometric considerations (2) 320

SBR, reinforcement and crosslinking with silanized precipitated silica nanofiller (1) 39
e-SBR, sulfur vulcanization with various accelerators (1) 1
Scorch delay, coagents for improving during peroxide vulcanization (4) 694
Secondary amines, in rubber compounds (review) (3) 541
Shear behavior, of coated fabrics, factors determining (2) 199
Shear-modified PB, to improve processing (2) 267
Silanes, reaction with dihydroxy vulcanized fluoroelastomers, thermal characterization (5) 765
Silanized precipitated silica nanofiller, for reinforcing and crosslinking SBR (1) 39
Silica nanofiller, silanized, for reinforcing and crosslinking SBR (1) 39
Silicones, biomedical applications (review) (3) 500
Smith, Thor L., 2005 International Rubber Science Hall of Fame inductee (biog) (2) G2
Sparks—Thomas Award, 2005, to Vasilios Galiatsatos (2) G5
Squalene, model compound for studying accelerated S vulcanization of IR (1) 135
Staining, of polymers, for microscopical examination (review) (3) 520
Storage, long term, effect on physical properties of NR (1) 72
Strain energy functions, of rubber-like materials using phenomenological approach (bibliog) (3) 489
Strain-induced crystallization, of rubber and thermoplastic elastomers, studied by x-ray synchrotron (3) 460
Strain-stiffening models, phenomenological hyperelastic, for rubber (1) 152
Strength concepts, for ionomeric membranes (5) 881
Stresses, in real rubber networks, to determine elasticity of ideal networks (1) 94
Stress states, in ionomeric membranes, material response and strain criteria (5) 881
Synchrotron x-ray studies, of vulcanized rubbers and thermoplastic elastomers (review) (3) 460

Tensile retraction measurements, for determining effect of crosslinking, entanglements, end linking to carbon black (2)
338
Test specimen, asymmetric, proposed for rubber—metal bonds (2) 320
Thermal oxidation, in auto tires, numerical simulation (2) 219
Three-dimensional morphology, of carbon black in NR vulcanizates, shown by 3D-TEM (4) 653

Tire cord adhesion, bonding interface structure influenced by zinc source (5) 790
Tires, numerical simulation of thermal oxidation (2) 219
Transmission electron microscopy, three-D, for studying carbon black in NR vulcanizates (4) 653
Truck tire treads, reduced hysteresis by use of aramid short fibers (1) 26

Viscoelastic properties, of polybutadiene with varying microstructure (5) 859
Void volume models, for furnace blacks, to determine structure (5) 735
Wang, Meng-Jiao, Melvin Mooney Distinguished Technology Award (2) G4
Weave patterns, factor in properties of fabric reinforced rubber (2) 199
Wilkes, Garth L., Chemistry of Thermoplastic Elastomers Award, 2005 (2) G6
WLF Equation, background (3) 381
Yarn size and spacing, effect on behavior of fabric reinforced rubber (2) 199
Zinc source, influence on tire cord adhesion interface (5) 790
Zinc-free curatives, for SBR (4) 561